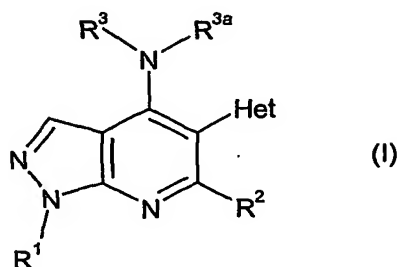


CLAIMS

1. A compound of formula (I) or a salt thereof:



wherein:

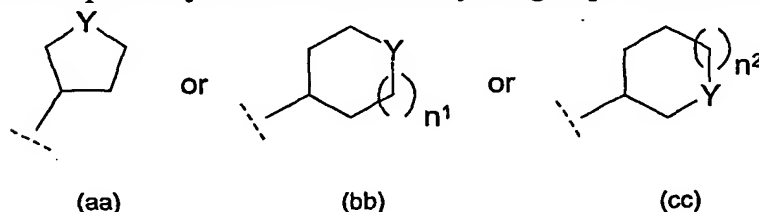
10

R¹ is C₁₋₄alkyl, C₁₋₃fluoroalkyl or -(CH₂)₂OH;

R² is a hydrogen atom (H), methyl or C₁ fluoroalkyl;

15

R³ is optionally substituted branched C₃₋₆alkyl, optionally substituted C₃₋₈cycloalkyl, optionally substituted mono-unsaturated-C₅₋₇cycloalkenyl, optionally substituted phenyl, or an optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc):



20

in which n¹ and n² independently are 1 or 2; and Y is O, S, SO₂, or NR⁴; where R⁴ is a hydrogen atom (H), C₁₋₂alkyl, C₁₋₂fluoroalkyl, CH₂C(O)NH₂, C(O)NH₂, C(O)-C₁₋₂alkyl, or C(O)-C₁ fluoroalkyl;

25

wherein in R³ the optionally substituted branched C₃₋₆alkyl is optionally substituted with one or two substituents being oxo (=O), OH, C₁₋₂alkoxy or C₁₋₂fluoroalkoxy; and wherein any such substituent is not substituted at the R³ carbon atom attached (bonded) to the -NH- group of formula (I);

30

wherein in R³ the phenyl is optionally substituted with one substituent being fluoro, chloro, C₁₋₂alkyl, C₁₋₂fluoroalkyl, C₁₋₂alkoxy, C₁₋₂fluoroalkoxy or cyano, or with two or three fluoro substituents;

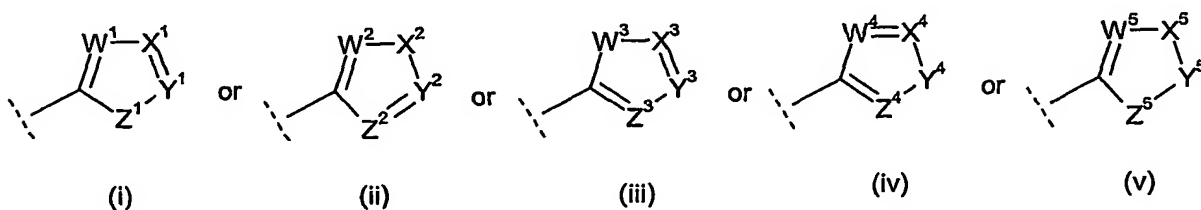
wherein in R^3 the C_{3-8} cycloalkyl or the heterocyclic group of sub-formula (aa), (bb) or (cc) is optionally substituted with one or two substituents independently being oxo ($=O$); OH; C_{1-2} alkoxy; C_{1-2} fluoroalkoxy; NHR^{21} wherein R^{21} is a hydrogen atom (H) or C_{1-4} straight-chain alkyl; C_{1-2} alkyl; C_{1-2} fluoroalkyl; $-CH_2OH$; $-CH_2CH_2OH$;
 5 $-CH_2NHR^{22}$ wherein R^{22} is H or C_{1-2} alkyl; $-C(O)OR^{23}$ wherein R^{23} is H or C_{1-2} alkyl; $-C(O)NHR^{24}$ wherein R^{24} is H or C_{1-2} alkyl; $-C(O)R^{25}$ wherein R^{25} is C_{1-2} alkyl; fluoro; hydroxyimino ($=N-OH$); or $(C_{1-4}alkoxy)imino (=N-OR^{26})$ where R^{26} is $C_{1-4}alkyl$; and wherein any OH, alkoxy, fluoroalkoxy or NHR^{21} substituent is not substituted at the R^3 ring carbon attached (bonded) to the $-NH-$ group of formula (I) and
 10 is not substituted at either R^3 ring carbon bonded to the Y group of the heterocyclic group (aa), (bb) or (cc);

and wherein, when R^3 is optionally substituted mono-unsaturated- C_{5-7} cycloalkenyl, then the cycloalkenyl is optionally substituted with one or two substituents independently
 15 being fluoro or C_{1-2} alkyl provided that if there are two substituents then they are not both C_2 alkyl, and the R^3 ring carbon bonded to the $-NH-$ group of formula (I) does not partake in the cycloalkenyl double bond;

20 and R^{3a} is a hydrogen atom (H) or straight-chain C_{1-3} alkyl;

provided that when R^{3a} is C_{1-3} alkyl then R^3 is tetrahydro-2H-pyran-4-yl, cyclohexyl (i.e. unsubstituted), 3-hydroxy-cyclohexyl, 4-oxo-cyclohexyl or 4-(hydroxyimino)cyclohexyl;
 25

and wherein Het is of sub-formula (i), (ii), (iii), (iv) or (v):



30

wherein:

W^1 , W^2 , W^4 and W^5 is N; and W^3 is NR^W ;

35 X^1 , X^3 and X^4 is N or CR^X ; X^2 is O, S or NR^X ; and X^5 is $CR^{X1}R^{X2}$ or $CR^{X3}R^{X4}$;

Y^1, Y^2 and Y^3 is CR^Y or N; Y^4 is O, S or NR^Y ; and Y^5 is $CR^{Y^1}R^{Y^2}$;

Z^1 and Z^5 is O, S or NR^Z ; and Z^2, Z^3 and Z^4 is N or CR^Z ;

5 wherein:

R^W is a hydrogen atom (H) or C_{1-2} alkyl;

R^X, R^{X^2}, R^Y and R^{Y^2} independently are:

a hydrogen atom (H);

10 C_{1-8} alkyl;

C_{3-6} cycloalkyl optionally substituted by one or two C_{1-2} alkyl groups and/or by one oxo (=O) group;

15 $-(CH_2)_n^{2a}-C_{3-6}$ cycloalkyl optionally substituted, in the $-(CH_2)_n^{2a}$ moiety or in the C_{3-6} cycloalkyl moiety, by a C_{1-2} alkyl group, or optionally substituted in the C_{3-6} cycloalkyl moiety by a $-CH_2C(O)NHC_{1-2}$ alkyl group, wherein n^{2a} is 1, 2 or 3;

$-(CH_2)_n^3-S(O)_2-R^5, -CH(C_{1-2}alkyl)-S(O)_2-R^5, -CMe_2-S(O)_2-R^5$, or

C_{3-5} cycloalkyl substituted at the connecting carbon atom by $-S(O)_2-R^5$, wherein n^3 is 1 or 2;

20 and R^5 is C_{1-4} alkyl, $-NR^{15}R^{16}$, phenyl, carbon-linked-pyridinyl or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, C_{1-2} alkyl, C_1 fluoroalkyl, C_{1-2} alkoxy, C_1 fluoroalkoxy or OH, and wherein the pyridinyl is optionally substituted by one methyl, methoxy or OH (including any tautomer thereof));

25 wherein R^{15} is H, C_{1-4} alkyl, phenyl, benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, C_{1-2} alkyl, C_1 fluoroalkyl, C_{1-2} alkoxy or C_1 fluoroalkoxy), $CH(Me)Ph$, or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

30 and R^{16} is H or C_{1-2} alkyl;

or wherein R^{15} and R^{16} together are $-(CH_2)_n^{3a}-X^{3a}-(CH_2)_n^{3b}-$ in which n^{3a} and n^{3b} independently are 2 or 3 and X^{3a} is a bond, $-CH_2-$, O, or NR^{8a}

35 wherein R^{8a} is H or C_{1-2} alkyl, acetyl, $-S(O)_2Me$ or phenyl, and wherein the ring formed by $NR^{15}R^{16}$ is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

$-(CH_2)_n^4-NR^6R^7$, $-CH(C_{1-2}alkyl)-NR^6R^7$, $-CMe_2-NR^6R^7$, or $C_{3-5}cycloalkyl$ substituted at the connecting carbon atom by $-NR^6R^7$, wherein n^4 is 0, 1, 2 or 3;

and R^6 and R^7 independently are H, $C_{1-6}alkyl$, $C_{3-6}cycloalkyl$,

$-CH_2-C_{3-6}cycloalkyl$, $-C(O)R^{17}$, $-S(O)_2R^{18}$, phenyl, benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, $C_{1-2}alkyl$, C_1 fluoroalkyl, $C_{1-2}alkoxy$ or C_1 fluoroalkoxy), or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

and wherein R^{17} and R^{18} independently are $C_{1-6}alkyl$, $C_{3-6}cycloalkyl$, optionally substituted 5-membered heteroaryl being furyl (furan) or 1,3-oxazolyl or isoxazolyl or oxadiazolyl or thienyl or 1,3-thiazolyl or isothiazolyl or pyrrolyl or imidazolyl or pyrazolyl (all independently optionally substituted by one oxo and/or one or two methyl), or phenyl or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, $C_{1-2}alkyl$, C_1 fluoroalkyl, $C_{1-2}alkoxy$, C_1 fluoroalkoxy or OH), or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

or R^6 and R^7 together are $-(CH_2)_n^5-X^5-(CH_2)_n^6-$ in which n^5 and n^6 independently are 2 or 3 and X^5 is a bond, $-CH_2-$, O, or NR^8 wherein R^8 is H, $C_{1-2}alkyl$, acetyl, $-S(O)_2Me$ or phenyl, and wherein the ring formed by NR^6R^7 is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo ($=O$);

$-(CH_2)_n^7-O-R^9$; wherein n^7 is 0, 1, 2 or 3 and R^9 is H, $C_{1-6}alkyl$, $C_{3-6}cycloalkyl$, $-CH_2-C_{3-6}cycloalkyl$, $-C(O)R^{17}$, phenyl, or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of fluoro, chloro, $C_{1-2}alkyl$, C_1 fluoroalkyl, $C_{1-2}alkoxy$ or C_1 fluoroalkoxy); wherein n^7 is 0 only when the $-(CH_2)_n^7-O-R^9$ is bonded to a carbon atom in the Het ring; and wherein n^7 is not 0 when Het is of sub-formula (v) (i.e. n^7 is not 0 for R^{X2} and for R^{Y2});

$-(CH_2)_n^{11}-C(O)-NR^{10}R^{11}$, $-CH(C_{1-2}alkyl)-C(O)-NR^{10}R^{11}$, $-CMe_2-C(O)-NR^{10}R^{11}$, or $C_{3-5}cycloalkyl$ substituted at the connecting carbon atom by $-C(O)-NR^{10}R^{11}$, wherein n^{11} is 0, 1 or 2;

and wherein R^{10} and R^{11} independently are H; $C_{1-6}alkyl$; $C_{1-4}fluoroalkyl$; $C_{2-4}alkyl$ substituted by one OH or $-OC_{1-2}alkyl$ other than at the connection point; $C_{3-6}cycloalkyl$ optionally substituted by one or two methyl groups; $-CH_2-C_{3-6}cycloalkyl$ optionally substituted by one methyl,

NH₂ or NHMe group; -(CH₂)_n¹⁷-Het²; carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof); phenyl; benzyl; or -CH(C₁₋₂alkyl)Ph [wherein the phenyl, benzyl and -CH(C₁₋₂alkyl)Ph are independently optionally substituted on the aromatic ring by one or two substituents independently being: fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy, C₁fluoroalkoxy, OH, -NR^{10a}R^{10b} (wherein R^{10a} is H or C₁₋₂alkyl and R^{10b} is H, C₁₋₂alkyl, -C(O)-C₁₋₂alkyl or -S(O)₂-C₁₋₂alkyl), -C(O)-NR^{10c}R^{10d} (wherein R^{10c} and R^{10d} independently are H or C₁₋₂alkyl), or -S(O)₂-R^{10e} (wherein R^{10e} is C₁₋₂alkyl, NH₂, NHMe or NMe₂)];

wherein n¹⁷ is 0, 1 or 2 and wherein Het² is a 4-, 5- or 6- membered saturated heterocyclic ring containing one O or S ring atom or one NR²⁷ ring group wherein R²⁷ is H, C₁₋₂alkyl, -C(O)Me, or -S(O)₂Me, wherein the Het² ring is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

and wherein when n¹⁷ is 2 then the Het² ring can optionally contain one additional ring N atom at the Het² ring position bonded to the -(CH₂)_n¹⁷- moiety; provided that, when Het² contains one O or S or NR²⁷ ring atom/group and one additional ring N atom, then the O/S/NR²⁷ ring atom/group and the one additional ring N atom are not directly bonded to each other, and are separated by more than one carbon atom;

or R¹⁰ and R¹¹ together are -(CH₂)_n⁸-X⁶-(CH₂)_n⁹- in which n⁸ and n⁹ independently are 2 or 3 and X⁶ is a bond, -CH₂-, O, or NR¹² wherein R¹² is H, C₁₋₂alkyl, acetyl, -S(O)₂Me or phenyl, and wherein the ring formed by NR¹⁰R¹¹ is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

-(CH₂)_n¹²-C(O)-OR¹³ wherein n¹² is 0, 1 or 2; and wherein R¹³ is H, C₁₋₆alkyl, C₃₋₆cycloalkyl, -CH₂-C₃₋₆cycloalkyl, phenyl, or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of (independently) fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy or C₁fluoroalkoxy);

-(CH₂)_n¹³-C(O)-R^{13a} wherein n¹³ is 0, 1 or 2; and wherein R^{13a} is a hydrogen atom (H), C₁₋₆alkyl, C₁₋₂fluoroalkyl, C₃₋₆cycloalkyl, -CH₂-C₃₋₆cycloalkyl, benzyl, or phenyl; wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of (independently) fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy or C₁fluoroalkoxy;

-(CH₂)_n¹⁴-Het¹, -CH(C₁₋₂alkyl)-Het¹, -CMe₂-Het¹, or C₃₋₅cycloalkyl substituted at the connecting carbon atom by Het¹, wherein n¹⁴ is 0, 1 or 2 and wherein Het¹ is a 4-, 5-, 6- or 7-membered saturated heterocyclic ring;

wherein said heterocyclic ring Het¹ contains one O or S ring atom and/or one NR¹⁴ ring group wherein R¹⁴ is H, C₁₋₄alkyl, C₃₋₆cycloalkyl, benzyl, phenyl, -C(O)R¹⁹, or -S(O)₂R¹⁹;

wherein R¹⁹, independent of any other R¹⁹, is C₁₋₆alkyl, C₃₋₆cycloalkyl, thienyl, furyl (furanyl), or phenyl or benzyl; wherein the phenyl and benzyl are independently optionally substituted by one or two of (independently) fluoro, methyl or methoxy;

and wherein said heterocyclic ring Het¹ is optionally substituted (at a position or positions other than any NR¹⁴ position) by one or two oxo (=O) and/or one C₁₋₄alkyl substituents;

provided that, when the heterocyclic ring Het¹ contains one O or S ring atom and one NR¹⁴ ring group then: (a) the O/S ring atom and the NR¹⁴ ring group are not directly bonded to each other, and (b) the O/S ring atom and the NR¹⁴ ring group are separated by more than one carbon atom unless Het¹ contains an -NR¹⁴-C(O)-O- or -NR¹⁴-C(O)-S- moiety as part of the ring; or -(CH₂)_n¹⁰-Ar, -CH(C₁₋₂alkyl)-Ar, -CMe₂-Ar, or C₃₋₅cycloalkyl substituted at the connecting carbon atom by Ar, wherein n¹⁰ is 0, 1 or 2 and

(i) Ar is phenyl optionally substituted by one or two substituents independently being fluoro, chloro, bromo, C₁₋₂alkyl, C₁₋₂fluoroalkyl, C₁₋₂alkoxy, C₁₋₂fluoroalkoxy, OH, -NR^{11a}R^{11b} (wherein R^{11a} is H or C₁₋₂alkyl and R^{11b} is H, C₁₋₂alkyl, -C(O)-C₁₋₂alkyl or -S(O)₂-C₁₋₂alkyl), cyano, -C(O)-NR^{11c}R^{11d} (wherein R^{11c} and R^{11d} independently are H or C₁₋₂alkyl), -C(O)-OR^{11e} wherein R^{11e} is H or C₁₋₂alkyl, or -S(O)₂-R^{11f} (wherein R^{11f} is C₁₋₂alkyl, NH₂, NHMe or NMe₂); or the phenyl Ar is

optionally substituted at two adjacent Ar ring atoms by the two ends of a chain which is: -(CH₂)₄-, -(CH₂)₃-, or -CH=CH-CH=CH-; or

(ii) Ar is an optionally substituted 5- or 6-membered heterocyclic aromatic ring containing 1, 2, 3 or 4 heteroatoms selected from O, N or S; and wherein when the heterocyclic aromatic ring Ar contains 2, 3 or 4 heteroatoms, one is selected from O, N and S and the remaining heteroatom(s) are N; and wherein the heterocyclic aromatic ring Ar is optionally substituted by one or two groups independently being C₁₋₄alkyl or OH (including any keto tautomer of an OH-substituted aromatic ring), or the heterocyclic aromatic ring Ar is optionally substituted at two adjacent Ar ring atoms by the two ends of a chain which is: -(CH₂)₄-, -(CH₂)₃-, or -CH=CH-CH=CH-;

R^{X1} and R^{Y1} independently are a hydrogen atom (H), C₁₋₂alkyl or C₁fluoroalkyl;

R^{X3} and R^{X4} together are $-(CH_2)_{n^{15}}-X^7-(CH_2)_{n^{16}}-$ wherein n^{15} and n^{16} independently are 1 or 2 and X^7 is a bond, $-CH_2-$, O, or NR^{X5} wherein R^{X5} is H, C_{1-2} alkyl, acetyl or $-S(O)_2Me$; and

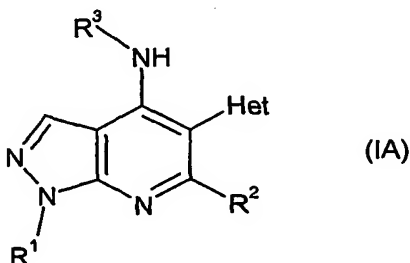
5 R^Z is a hydrogen atom (H) or C_{1-2} alkyl,

provided that:

when R^3 is the heterocyclic group of sub-formula (bb), n^1 is 1, and Y is NR^4 , then R^4 is not C_{1-2} alkyl, C_{1-2} fluoroalkyl or $CH_2C(O)NH_2$.

10

2. A compound of formula (IA) or a salt thereof:



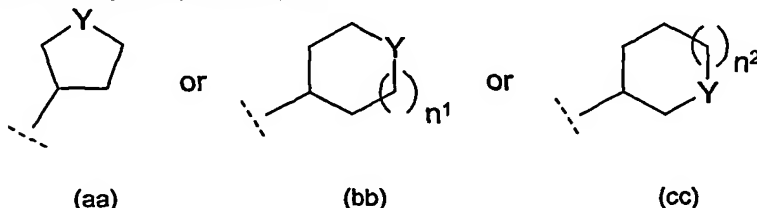
15

wherein:

R^1 is C_{1-4} alkyl, C_{1-3} fluoroalkyl or $-(CH_2)_2OH$;

20 R^2 is a hydrogen atom (H), methyl or C_1 fluoroalkyl;

R^3 is optionally substituted branched C_{3-6} alkyl, optionally substituted C_{3-8} cycloalkyl, optionally substituted phenyl, or an optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc):



25

in which n^1 and n^2 independently are 1 or 2; and Y is O, S, SO_2 , or NR^4 ; where R^4 is a hydrogen atom (H), C_{1-2} alkyl, C_{1-2} fluoroalkyl, $CH_2C(O)NH_2$, $C(O)NH_2$, $C(O)-C_{1-2}$ alkyl, or $C(O)-C_{1-2}$ fluoroalkyl;

wherein in R^3 the optionally substituted branched C_{3-6} alkyl is optionally substituted with one or two substituents being oxo ($=O$), OH, C_{1-2} alkoxy or C_{1-2} fluoroalkoxy; and wherein any such substituent is not substituted at the R^3 carbon atom attached (bonded) to the -NH- group of formula (IA);

5

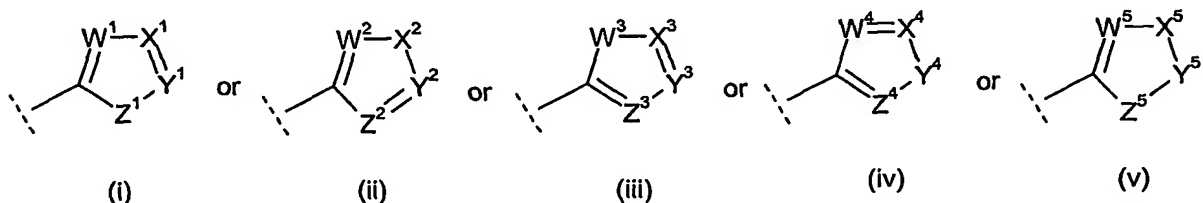
wherein in R^3 the phenyl is optionally substituted with one substituent being fluoro, chloro, C_{1-2} alkyl, C_{1-2} fluoroalkyl, C_{1-2} alkoxy, C_{1-2} fluoroalkoxy or cyano;

10

wherein in R^3 the C_{3-8} cycloalkyl or the heterocyclic group of sub-formula (aa), (bb) or (cc) is optionally substituted with one or two substituents being oxo ($=O$), OH, C_{1-2} alkoxy, C_{1-2} fluoroalkoxy, or C_{1-2} alkyl; and wherein any OH, alkoxy or fluoroalkoxy substituent is not substituted at the R^3 ring carbon attached (bonded) to the -NH- group of formula (IA) and is not substituted at either R^3 ring carbon bonded to the Y group of the heterocyclic group (aa), (bb) or (cc);

15

and wherein Het is of sub-formula (i), (ii), (iii), (iv) or (v):



20

wherein:

W^1 , W^2 , W^4 and W^5 is N; and W^3 is NR^W ;

X^1 , X^3 and X^4 is N or CR^X ; X^2 is O, S or NR^X ; and X^5 is $CR^{X1}R^{X2}$;

25

Y^1 , Y^2 and Y^3 is CR^Y or N; Y^4 is O, S or NR^Y ; and Y^5 is $CR^{Y1}R^{Y2}$;

Z^1 and Z^5 is O, S or NR^Z ; and Z^2 , Z^3 and Z^4 is N or CR^Z ;

wherein:

30

R^W is a hydrogen atom (H) or C_{1-2} alkyl;

R^X , R^{X2} , R^Y and R^{Y2} independently are:

a hydrogen atom (H);

C_{1-8} alkyl;

35

C_{3-6} cycloalkyl optionally substituted by a C_{1-2} alkyl group;

-(CH₂)_n^{2a}-C₃₋₆cycloalkyl optionally substituted, in the -(CH₂)_n^{2a} moiety or in the C₃₋₆cycloalkyl moiety, by a C₁₋₂alkyl group, wherein n^{2a} is 1, 2 or 3;

-(CH₂)_n³-SO₂-R⁵ wherein n³ is 1 or 2 and R⁵ is C₁₋₃alkyl or -NH-C₁₋₂alkyl or phenyl;

5 -(CH₂)_n⁴-NR⁶R⁷ wherein n⁴ is 0, 1, 2 or 3, and R⁶ and R⁷ independently are H, C₁₋₆alkyl, C₃₋₆cycloalkyl, -CH₂-C₃₋₆cycloalkyl, -C(O)-C₁₋₂alkyl, -SO₂-C₁₋₂alkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy or C₁fluoroalkoxy); or R⁶ and R⁷ together are
 10 -(CH₂)_n⁵-X⁵-(CH₂)_n⁶- in which n⁵ and n⁶ independently are 2 or 3 and X⁵ is a bond, -CH₂-, O, or NR⁸ wherein R⁸ is H or C₁₋₂alkyl;

-(CH₂)_n⁷-O-R⁹; wherein n⁷ is 0, 1, 2 or 3 and R⁹ is H or C₁₋₆alkyl; wherein n⁷ is 0 only when the -(CH₂)_n⁷-O-R⁹ is bonded to a carbon atom in the Het ring; and wherein n⁷ is not 0 when Het is of sub-formula (v) (i.e. n⁷ is not 0 for R^{X2} and for R^{Y2});

15 -C(O)-NR¹⁰R¹¹ wherein R¹⁰ and R¹¹ independently are H, C₁₋₆alkyl, C₃₋₆cycloalkyl, -CH₂-C₃₋₆cycloalkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy or C₁fluoroalkoxy);
 20 or R¹⁰ and R¹¹ together are -(CH₂)_n⁸-X⁶-(CH₂)_n⁹- in which n⁸ and n⁹ independently are 2 or 3 and X⁶ is a bond, -CH₂-, O, or NR¹² wherein R¹² is H or C₁₋₂alkyl;

-C(O)-OR¹³ wherein R¹³ is H, C₁₋₆alkyl, C₃₋₆cycloalkyl, -CH₂-C₃₋₆cycloalkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy or C₁fluoroalkoxy);

25 -C(O)-R^{13a} wherein R^{13a} is a hydrogen atom (H), C₁₋₆alkyl, C₁₋₂fluoroalkyl, C₃₋₆cycloalkyl, -CH₂-C₃₋₆cycloalkyl, benzyl, or phenyl; wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy or C₁fluoroalkoxy;

30 a 4-, 5-, 6- or 7-membered saturated heterocyclic ring containing one O ring atom or one NR¹⁴ ring group wherein R¹⁴ is H or C₁₋₄alkyl, said heterocyclic ring being optionally substituted (at a position or positions other than any NR¹⁴ position) by one oxo (=O) and/or one C₁₋₄alkyl substituent; or

35 -(CH₂)_n¹⁰-Ar wherein n¹⁰ is 0, 1 or 2 and
 (i) Ar is phenyl optionally substituted by one or two substituents being fluoro, chloro, C₁₋₂alkyl, C₁₋₂fluoroalkyl, C₁₋₂alkoxy, C₁₋₂fluoroalkoxy or cyano;
 or

(ii) Ar is an optionally substituted 5- or 6-membered heterocyclic aromatic ring containing 1, 2 or 3 heteroatoms selected from O, N or S; and wherein when the heterocyclic aromatic ring Ar contains 2 or 3 heteroatoms, one is selected from O, N and S and the remaining heteroatom(s) are N; and wherein the heterocyclic aromatic ring Ar is optionally substituted by one or two C₁₋₄alkyl groups;

R^{X1} and R^{Y1} independently are a hydrogen atom (H), C₁₋₂alkyl or C₁fluoroalkyl; and

R^Z is a hydrogen atom (H) or C₁₋₂alkyl;

provided that, when R³ is the heterocyclic group of sub-formula (bb), n¹ is 1, and Y is NR⁴, then R⁴ is not C₁₋₂alkyl, C₁₋₂fluoroalkyl or CH₂C(O)NH₂.

3. A compound or salt as claimed in claim 1, wherein R^{3a} is a hydrogen atom (H).

4. A compound or salt as claimed in claim 1, 2 or 3, wherein R² is a hydrogen atom (H) or methyl.

5. A compound or salt as claimed in claim 1, 2, 3 or 4, wherein R¹ is C₁₋₃alkyl, C₁₋₂fluoroalkyl or -CH₂CH₂OH.

6. A compound or salt as claimed in any preceding claim, wherein R¹ is ethyl, n-propyl, C₂fluoroalkyl or -CH₂CH₂OH.

7. A compound or salt as claimed in any preceding claim, wherein R¹ is ethyl.

8. A compound or salt as claimed in any preceding claim, wherein in R³ there is one substituent or no substituent.

9. A compound or salt as claimed in any preceding claim, wherein, where R³ is optionally substituted branched C₃₋₆alkyl, then R³ is isobutyl, sec-butyl, t-butyl or 3-methylbutan-2-yl.

10. A compound or salt as claimed in any preceding claim, wherein, when R³ is optionally substituted phenyl, then the phenyl is optionally substituted with one substituent being fluoro, C₁alkyl, C₁fluoroalkyl, C₁alkoxy, or C₁fluoroalkoxy.

11. A compound or salt as claimed in any preceding claim, wherein, where R³ is optionally substituted C₃₋₈cycloalkyl, then R³ is optionally substituted C₆₋₈cycloalkyl.

12. A compound or salt as claimed in claim 11, wherein, where R^3 is optionally substituted C_{3-8} cycloalkyl, then R^3 is optionally substituted cyclohexyl.

13. A compound or salt as claimed in any preceding claim, wherein, where R^3 is optionally substituted C_{3-8} cycloalkyl, then the one or two optional substituents is or independently are: oxo ($=O$); OH; NHR^{21} wherein R^{21} is a hydrogen atom (H); methyl; $-CH_2F$; $-CHF_2$; $-C(O)OR^{23}$ wherein R^{23} is H; fluoro; hydroxyimino ($=N-OH$); or $(C_{1-2}alkoxy)imino (=N-OR^{26})$ where R^{26} is $C_{1-2}alkyl$.

14. A compound or salt as claimed in any preceding claim, wherein, where R^3 is optionally substituted C_{3-8} cycloalkyl, then the one or two optional substituents is or independently are OH, oxo ($=O$) or hydroxyimino ($=N-OH$).

15. A compound or salt as claimed in any preceding claim, wherein, where R^3 is optionally substituted C_{3-8} cycloalkyl, then the one or two optional substituents if present is or are substituent(s) at the 3-, 4- or 5- position(s) of the R^3 cycloalkyl ring, (wherein the 1-position of the R^3 cycloalkyl ring is deemed to be the connection point to the $-NH-$ in formula (I) or (IA) or (IB)).

16. A compound or salt as claimed in any preceding claim, wherein, where R^3 is optionally substituted C_6 cycloalkyl, then R^3 is cyclohexyl (i.e. unsubstituted), 3-hydroxy-cyclohexyl (i.e. 3-hydroxycyclohexan-1-yl), 4-oxo-cyclohexyl (i.e. 4-oxocyclohexan-1-yl), 4-(hydroxyimino)cyclohexyl (i.e. 4-(hydroxyimino)cyclohexan-1-yl), 4-($C_{1-2}alkoxyimino$)cyclohexyl, 1-methylcyclohexyl or 3-methylcyclohexyl.

17. A compound or salt as claimed in any preceding claim, wherein, where R^3 is optionally substituted mono-unsaturated- C_{5-7} cycloalkenyl, then R^3 is optionally substituted mono-unsaturated- C_6 cycloalkenyl (i.e. optionally substituted mono-unsaturated-cyclohexenyl), and wherein the R^3 cycloalkenyl is optionally substituted with one or two substituents independently being fluoro or methyl.

18. A compound or salt as claimed in any preceding claim, wherein R^4 is a hydrogen atom (H) or $C(O)-Me$.

19. A compound or salt as claimed in any preceding claim, wherein, where R^3 is the heterocyclic group of sub-formula (aa), (bb) or (cc), then Y is O.

20. A compound or salt as claimed in any preceding claim, wherein where R^3 is the heterocyclic group of sub-formula (aa), (bb) or (cc), then R^3 is the heterocyclic group of sub-formula (bb) and n^1 is 1.

21. A compound or salt as claimed in any preceding claim, wherein, in R^3 , the heterocyclic group of sub-formula (aa), (bb) or (cc) is unsubstituted (wherein, where Y is NR^4 , R^4 is not classified as a substituent).

5

22. A compound or salt as claimed in any of claims 1 to 20, wherein, in the R^3 heterocyclic group of sub-formula (aa), (bb) or (cc), the one or two optional substituents is or are oxo (=O).

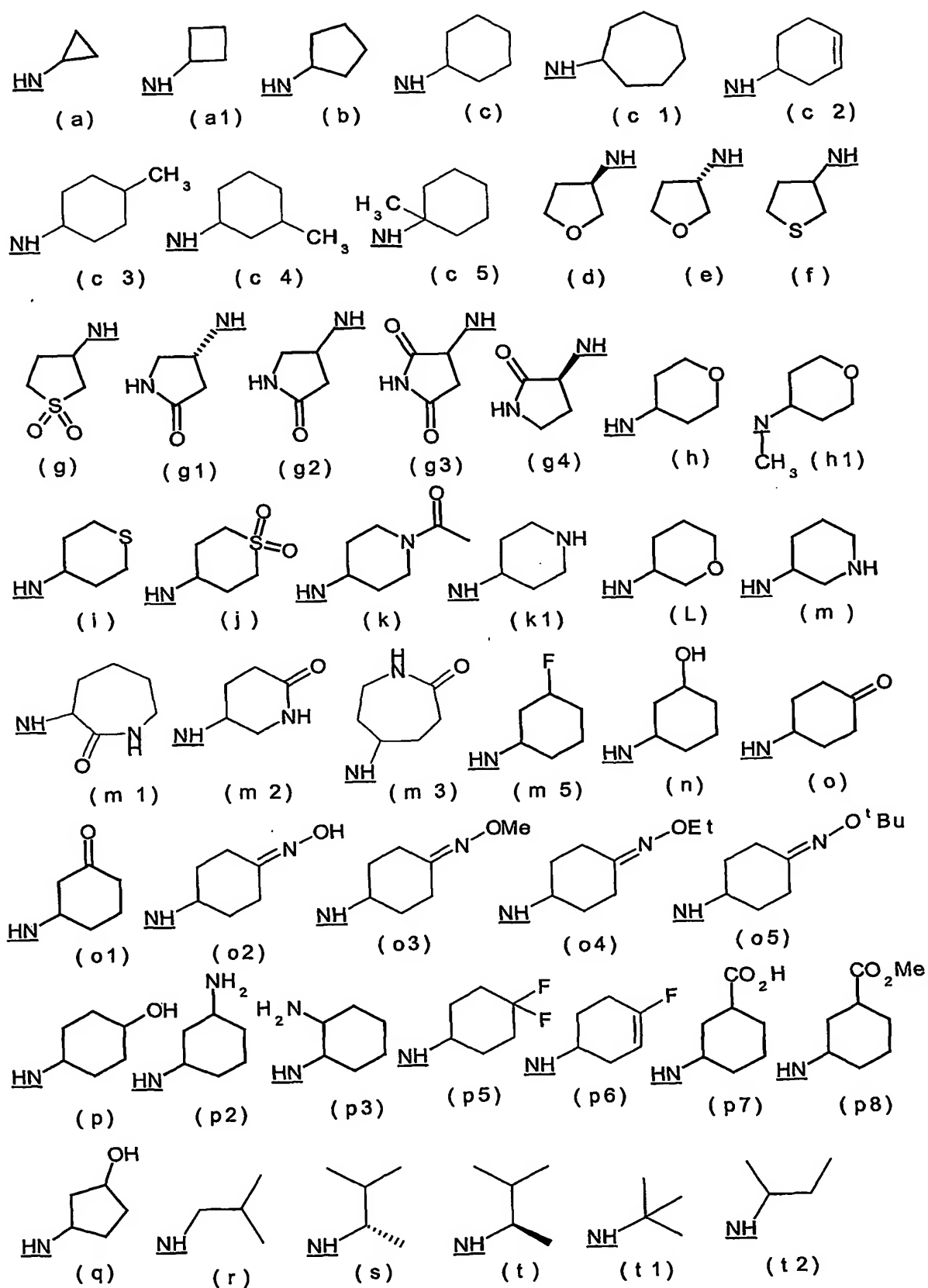
10

23. A compound or salt as claimed in any preceding claim, wherein
when R^3 is the heterocyclic group of sub-formula (aa), then Y is not NR^4 , and
when R^3 is the heterocyclic group of sub-formula (bb) and Y is NR^4 , then R^4 is not C_{1-2} alkyl, C_{1-2} fluoroalkyl or $CH_2C(O)NH_2$.

15

24. A compound or salt as claimed in any preceding claim, wherein NHR^3 or NR^3R^{3a} is of sub-formula (a), (a1), (b), (c), (c 1), (c 2), (c 3), (c 4), (c 5), (d), (e), (f), (g), (g1), (g2), (g3), (g4), (h), (h1), (i), (j), (k), (k1), (L), (m), (m1), (m2), (m3), (m5), (n), (o), (o1), (o2), (o3), (o4), (o5), (p), (p2), (p3), (p5), (p6), (p7), (p8), (q), (r), (s), (t), (t1) or (t2):

20



25. A compound or salt as claimed in claim 24, wherein NHR^3 or NR^3R^{3a} is of sub-formula (c), (c1), (c 4), (c 5), (h), (i), (j), (k), (m1), (m2), (n), (o), (o2), (o3), (p2), (p5), (p6), (r), (s) or (t1).

5

26. A compound or salt as claimed in claim 24, wherein NHR^3 or NR^3R^{3a} is of sub-formula (c), (h), (k), (n), (o), (o2) or (s).

10

27. A compound or salt as claimed in claim 24, wherein NHR^3 or NR^3R^{3a} is of sub-formula (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (L), (m), (n), (o), (p), (q), (r), (s) or (t).

15

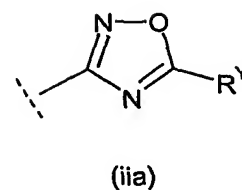
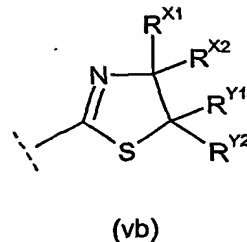
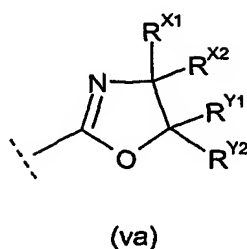
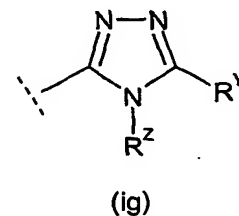
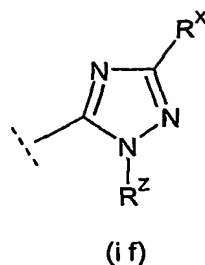
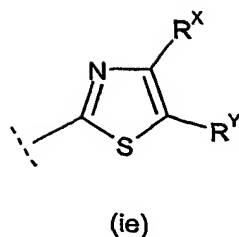
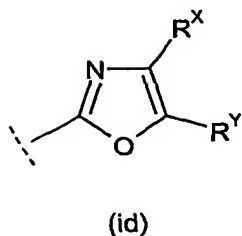
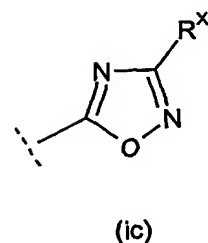
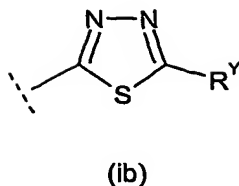
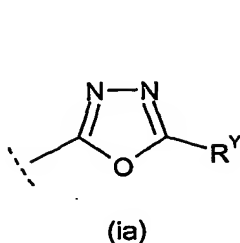
28. A compound or salt as claimed in claim 24, wherein R^3 is tetrahydro-2H-pyran-4-yl; that is NHR^3 or NR^3R^{3a} is of sub-formula (h).

29. A compound or salt as claimed in any preceding claim, wherein Het is of sub-formula (i), (ii) or (v).

20

30. A compound or salt as claimed in claim 29, wherein Z^1 and Z^5 are O.

31. A compound or salt as claimed in claim 29 or 30, wherein Het is of sub-formula (ia), (ib), (ic), (id), (ie), (if), (ig), (va), (vb) or (iia):



32. A compound or salt as claimed in claim 31, wherein Het is of sub-formula (ia), (ib), (ic), (id), (if), (ig), (va) or (iia).

5

33. A compound or salt as claimed in claim 31, wherein Het is of sub-formula (ia), (ic), (id) or (va).

34. A compound or salt as claimed in any preceding claim, wherein R^W and R^Z are a hydrogen atom (H).

10

35. A compound or salt as claimed in any preceding claim, wherein for the Het group, one of R^X and R^Y (or R^{X2} and R^{Y2}) is as defined herein and the other of R^X and R^Y (or R^{X2} and R^{Y2}) is a hydrogen atom (H).

15

36. A compound or salt as claimed in any preceding claim, wherein R^X , R^{X2} , R^Y and R^{Y2} independently are:

a hydrogen atom (H);

C_{1-8} alkyl;

optionally substituted C_{3-6} cycloalkyl;

optionally substituted $-(CH_2)_n^{2a}-C_{3-6}$ cycloalkyl;

20

$-(CH_2)_n^3-S(O)_2-R^5$, $-CH(Me)-S(O)_2-R^5$, or C_3 cycloalkyl substituted at the
 connecting carbon atom by $-S(O)_2-R^5$;
 $-(CH_2)_n^4-NR^6R^7$ or $-CH(Me)-NR^6R^7$;
 $-(CH_2)_n^7-O-R^9$;
 5 $-(CH_2)_n^{11}-C(O)-NR^{10}R^{11}$ or $-CH(Me)-C(O)-NR^{10}R^{11}$;
 $-(CH_2)_n^{12}-C(O)-OR^{13}$;
 $-(CH_2)_n^{13}-C(O)-R^{13a}$;
 $-(CH_2)_n^{14}-Het^1$ or $-CH(Me)-Het^1$; or
 $-(CH_2)_n^{10}-Ar$ or $-CH(Me)-Ar$.

10 37. A compound or salt as claimed in any preceding claim, wherein one of R^X and R^Y , and for Het of sub-formula (v) one of R^{X2} and R^{Y2} , is:
 $-(CH_2)_n^4-NR^6R^7$, $-CH(Me)-NR^6R^7$, $-(CH_2)_n^{11}-C(O)-NR^{10}R^{11}$, $-(CH_2)_n^{14}-Het^1$, or
 $-(CH_2)_n^{10}-Ar$.

15 38. A compound or salt as claimed in any preceding claim, wherein R^X , R^{X2} , R^Y and R^{Y2} independently are:

C_{1-6} alkyl;

20 optionally substituted C_{3-6} cycloalkyl;

$-(CH_2)_n^{2a}-C_{3-6}$ cycloalkyl optionally substituted by a C_{1-2} alkyl group; wherein
 n^{2a} is 1;

25 $-(CH_2)_n^3-S(O)_2-R^5$ or C_3 cycloalkyl substituted at the connecting carbon atom by
 $-S(O)_2-Ph$, wherein n^3 is 1 and R^5 is C_{1-4} alkyl, $-NR^{15}R^{16}$, optionally substituted
 phenyl or optionally substituted benzyl; wherein R^{16} is H or methyl and R^{15} is H,
 C_{1-4} alkyl or optionally substituted phenyl; or R^{15} and R^{16} together are
 30 $-(CH_2)_n^{3a}-X^{3a}-(CH_2)_n^{3b}$ wherein n^{3a} and n^{3b} are 2 and X^{3a} is a bond, $-CH_2-$, O, or
 NR^{8a} wherein R^{8a} is C_{1-2} alkyl or acetyl; and the ring formed by $NR^{15}R^{16}$ is not
 substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo ($=O$)
 substituent;

35 $-(CH_2)_n^4-NR^6R^7$, $-CH(Me)-NR^6R^7$ or $-CMe_2-NR^6R^7$ wherein n^4 is 0 (when the
 $-(CH_2)_n^4-NR^6R^7$ is bonded to a carbon atom in the Het ring) or wherein n^4 is 1; and
 wherein R^6 is H or C_{1-4} alkyl and R^7 is H, C_{1-4} alkyl, $-C(O)R^{17}$ or $-S(O)_2R^{18}$; or R^6

and R⁷ together are -(CH₂)_n⁵-X⁵-(CH₂)_n⁶- in which n⁵ and n⁶ are 2 and X⁵ is a bond, -CH₂-, O, or NR⁸, and wherein the ring formed by NR⁶R⁷ is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

5 -(CH₂)_n⁷-O-R⁹, wherein n⁷ is 1 or 2 and R⁹ is H, C₁₋₄alkyl or phenyl;

-(CH₂)_n¹¹-C(O)-NR¹⁰R¹¹, -CH(Me)-C(O)-NR¹⁰R¹¹ or
-CMe₂-C(O)-NR¹⁰R¹¹, wherein n¹¹ is 0 or 1,
and R¹⁰ is H or C₁₋₆alkyl,

10 and R¹¹ is: H; C₁₋₆alkyl; C₃₋₆cycloalkyl optionally substituted by one or two methyl groups; -CH₂-C₃₋₆cycloalkyl (unsubstituted); -(CH₂)_n¹⁷-Het²; optionally substituted carbon-linked-pyridinyl; optionally substituted phenyl, optionally substituted benzyl; or optionally substituted -CH(C₁₋₂alkyl)Ph; wherein the phenyl, the benzyl and the -CH(C₁₋₂alkyl)Ph are independently optionally substituted on the aromatic ring by
15 one or two substituents independently being: fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy, C₁fluoroalkoxy, -NR^{10a}R^{10b} (wherein R^{10a} is H or methyl and R^{10b} is H, C₁₋₂alkyl, -C(O)Me or -S(O)₂Me), -C(O)-NR^{10c}R^{10d} (wherein R^{10c} and R^{10d} independently are H or C₁₋₂alkyl), or -S(O)₂-R^{10e} (wherein R^{10e} is C₁₋₂alkyl, NH₂, NHMe or NMe₂); and wherein the carbon-linked-pyridinyl is preferably optionally
20 substituted by one OH (including any keto tautomer thereof);
or R¹⁰ and R¹¹ together are -(CH₂)_n⁸-X⁶-(CH₂)_n⁹- in which n⁸ and n⁹ are 2 and X⁶ is a bond, -CH₂-, O, or NR¹²; , and wherein the ring formed by NR¹⁰R¹¹ is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

25 -(CH₂)_n¹²-C(O)-OR¹³, wherein n¹² is 0 or 1, and R¹³ is H or C₁₋₄alkyl;

-(CH₂)_n¹³-C(O)-R^{13a}, n¹³ is 0 or 1, and R^{13a} is C₁₋₆alkyl, C₁₋₂fluoroalkyl, C₃₋₆cycloalkyl, -CH₂-C₃₋₆cycloalkyl, benzyl, or phenyl (wherein the phenyl and benzyl
30 are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C₁₋₂alkyl, C₁fluoroalkyl, C₁₋₂alkoxy or C₁fluoroalkoxy);

-(CH₂)_n¹⁴-Het¹, -CH(Me)-Het¹, or -CMe₂-Het¹, wherein n¹⁴ is 0 or 1, and Het¹ is 4-, 5- or 6-membered heterocyclic ring, and R¹⁴ is C₁₋₄alkyl, C(O)R¹⁹ or S(O)₂R¹⁹
35 wherein R¹⁹ is C₁₋₄alkyl, C₃₋₆cycloalkyl, 2-thienyl, furan-2-yl, phenyl (unsubstituted) or benzyl (unsubstituted);

or

$-(CH_2)_n^{10}$ -Ar wherein n^{10} is 0 or 1.

5 39. A compound or salt as claimed in any preceding claim, which is:

- N-Cyclopentyl-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 N-Cyclopentyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-
 b]pyridin-4-amine,
 10 N-Cyclopentyl-1-ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 N-Cyclopentyl-1-ethyl-5-(5-methyl-1,3,4-thiadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 N-Cyclopentyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-thiadiazol-2-yl}-1H-pyrazolo[3,4-
 b]pyridin-4-amine,
 N-Cyclopentyl-1-ethyl-5-(5-isopropyl-1,3,4-thiadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 15 1-Ethyl-N-(4-fluorophenyl)-5-(3-methyl-1,2,4-oxadiazol-5-yl)-1H-pyrazolo[3,4-b]pyridin-4-
 amine,
 N-Cyclopentyl-5-(1,3-dimethyl-1H-1,2,4-triazol-5-yl)-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-
 amine,
 1-Ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-
 20 b]pyridin-4-amine,
 N-Cyclohexyl-1-ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-N-isobutyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-N-isobutyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 N-Cyclohexyl-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 25 1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-
 b]pyridin-4-amine,
 N-[(1R)-1,2-dimethylpropyl]-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-
 b]pyridin-4-amine,
 N-[(1S)-1,2-dimethylpropyl]-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-
 30 b]pyridin-4-amine,
 5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-
 b]pyridin-4-amine,
 5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-cyclohexyl-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-cyclopentyl-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 35 5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-isobutyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-[(1S)-1,2-dimethylpropyl]-1-ethyl-1H-pyrazolo[3,4-
 b]pyridin-4-amine,
 5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-[(1R)-1,2-dimethylpropyl]-1-ethyl-1H-pyrazolo[3,4-
 b]pyridin-4-amine,
 40 1-Ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-N-tetrahydro-2H-pyran-4-yl-1H-
 pyrazolo[3,4-b]pyridin-4-amine,
 N-Cyclohexyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-
 b]pyridin-4-amine,

- 1-Ethyl-N-isobutyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
 N-[(1S)-1,2-dimethylpropyl]-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
 5 N-[(1R)-1,2-dimethylpropyl]-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-5-[3-(methoxymethyl)-1,2,4-oxadiazol-5-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 10 5-{3-[(Dimethylamino)methyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-5-[3-(morpholin-4-ylmethyl)-1,2,4-oxadiazol-5-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 15 5-(5-Cyclopropyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 N-(1-Acetylpiperidin-4-yl)-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-5-[5-(3-methyloxetan-3-yl)-1,3,4-oxadiazol-2-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 20 1-Ethyl-5-{5-[(4-methylpiperazin-1-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-isopropyl-1,3,4-oxadiazole-2-carboxamide,
 25 4-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-1-methylpyrrolidin-2-one,
 1-Ethyl-N-tetrahydro-2H-pyran-4-yl-5-(5-tetrahydro-2H-pyran-4-yl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-5-[5-(morpholin-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
 30 5-[5-(Tert-butoxymethyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine, or
 methyl 2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxylate;
 35 or a salt thereof.

40. A compound or salt as claimed in any of claims 1 to 38, which is:

40 Methyl 2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-4,5-dihydro-1,3-oxazole-4-carboxylate,

1-Ethyl-5-(4-methyl-4,5-dihydro-1,3-oxazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-(n-Propyl)-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

5 1-Ethyl-5-[5-(tetrahydrofuran-2-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-Ethyl-5-[5-(dimethylamino)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

10 1-Ethyl-5-(5-methyl-1,2,4-triazol-3-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-(1-Acetylpiperidin-4-yl)-1-ethyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine, or

N-(1-Acetylpiperidin-4-yl)-1-ethyl-5-[3-(morpholin-4-ylmethyl)-1,2,4-oxadiazol-5-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine;

15 or a salt thereof.

41. A compound or salt as claimed in any of claims 1 to 38, which is:

20 1-Ethyl-5-[(4R)-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-Ethyl-5-[(4S)-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

25 1-Ethyl-5-[(4S)-4-(phenylmethyl)-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-Ethyl-5-[(4R)-4-(phenylmethyl)-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

30 1-Ethyl-5-[(4S,5R)-5-methyl-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-Ethyl-5-[(5R)-5-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-Ethyl-5-[(5S)-5-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

35 5-(4,4-Dimethyl-4,5-dihydro-1,3-oxazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxylic acid,

40 2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(1-methylethyl)-1,3-oxazole-4-carboxamide,

1-Ethyl-5-[4-(4-morpholinylcarbonyl)-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

- 1-Ethyl-N-methyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
trans-4-{{[1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-yl]amino}cyclohexanol,
- 5 1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-3-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
4-{{[1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-yl]amino}cyclohexanone,
- 10 1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-n-propyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-[5-(1,1-Dimethylethyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-6-methyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-6-methyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-yl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine,
- 15 5-(5-Cyclobutyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-2-pyrrolidinone,
N-({5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)acetamide,
- 20 1-Ethyl-5-{5-(1-methyl-2-piperidinyl)-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-{5-[(4-methyl-1,2,5-oxadiazol-3-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
- 25 3-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}cyclopentanone,
1-Ethyl-5-[5-(tetrahydro-3-furanyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
(4S)-4-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-1,3-thiazolidin-2-one,
- 30 5-[5-(2,2-Dimethylcyclopropyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-({5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)-N-methylacetamide,
- 35 1-Ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(1-methylcyclobutyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(3-methyl-5-isoxazolyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
- 40 1-Ethyl-5-[5-(1-methyl-1H-pyrazol-5-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

- 5-[5-(1-Acetyl-4-piperidiny)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-5-{3-[(4-methyl-1-piperazinyl)methyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 5 1-Ethyl-5-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine, or
 1-Ethyl-5-{3-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine;
 10 or a salt thereof.

42. A compound or salt as claimed in any of claims 1 to 38, which is:

- 15 2-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-N-phenylacetamide,
 2-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-N-(1-phenylethyl)acetamide,
 1-Ethyl-5-{3-[2-oxo-2-(1-piperidiny)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 20 2-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-N-(phenylmethyl)acetamide,
 2-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-N,N-dimethylacetamide,
 25 N-Ethyl-2-{5-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}acetamide,
 1-Ethyl-5-{3-[1-(4-morpholinyl)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 5-[3-(Cyclohexylmethyl)-1,2,4-oxadiazol-5-yl]-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 30 1-Ethyl-5-{3-[2-oxo-2-(1-piperidiny)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-ethyl-5-{3-[2-(4-methyl-1-piperazinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 35 1-Ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(1H-1,2,3-triazol-1-ylmethyl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine,
 5-{5-[(2,4-Dimethyl-1,3-thiazol-5-yl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 1-Ethyl-5-[5-(2-furanylmethyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
 40 1-Ethyl-5-[5-(3-isoxazolylmethyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

- 1-ethyl-5-(5-{[4-(methyloxy)phenyl]methyl}-1,3,4-oxadiazol-2-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[5-(1*H*-tetrazol-1-ylmethyl)-1,3,4-oxadiazol-2-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5 1-Ethyl-5-[5-(5-isothiazolylmethyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{5-[(3-methyl-5-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-(5-{[4-(Dimethylamino)phenyl]methyl}-1,3,4-oxadiazol-2-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine (1:1),
10 1-Ethyl-5-{5-[(2-methyl-1,3-thiazol-4-yl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2-[1-(5-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl)methyl]cyclopentyl]-*N*-methylacetamide,
15 *N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl)methyl}cyclopropanecarboxamide,
1-Ethyl-5-{5-[(5-methyl-3-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{5-[(5-methyl-3-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
20 1-Ethyl-5-{5-[2-(4-methyl-1,3-thiazol-5-yl)ethyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-{5-[(3,5-Dimethyl-4-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
25 *N*-(1-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}ethyl)acetamide,
5-{5-[(1-acetyl-4-piperidinyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{5-[(4-methylphenyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
30 1-Ethyl-5-[5-(4-methylphenyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-[5-(3,4-Dimethylphenyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
35 5-[5-(2,4-Dimethylphenyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-{5-[(4-Bromophenyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-*N*-(phenylmethyl)-1,3-oxazole-4-carboxamide,
40 2-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-*N*-{[4-(methyloxy)phenyl]methyl}-1,3-oxazole-4-carboxamide,

- 2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(2-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(4-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,
5 2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(3-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,
N-[(4-Chlorophenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
N-[(2,3-Dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
10 N-[(3,5-Dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
N-[(3,4-Dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
15 2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(1-phenylethyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(1R)-1-[4-(methyloxy)phenyl]ethyl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(1R)-20 1-phenylpropyl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(4-methylphenyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(4-[(methylsulfonyl)amino]phenyl)methyl]-1,3-oxazole-4-carboxamide,
25 2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[[4-(methylsulfonyl)phenyl]methyl]-1,3-oxazole-4-carboxamide,
N-(1-Acetyl-4-piperidinyl)-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(tetrahydro-2H-pyran-4-yl)-1,3-oxazole-4-carboxamide,
30 2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(tetrahydro-2-furanylmethyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[2-(4-methyl-1-piperazinyl)ethyl]-1,3-oxazole-4-carboxamide,
35 N-[1-(Aminomethyl)cyclohexyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-methyl-1,3-oxazole-4-carboxamide,
N-(2,6-Dimethylphenyl)-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
N-[[4-(Aminocarbonyl)phenyl]methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
40 1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
2-[5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,2,4-oxadiazol-3-yl]-N-(tetrahydro-2H-pyran-4-yl)acetamide,

- 5- {3-[2-(2,6-Dimethyl-4-morpholinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-
(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5- {3-[2-(4-methyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-
(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5 2- {5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-
oxadiazol-3-yl}-*N*-[1-methyl-2-(methyloxy)ethyl]acetamide,
5- {3-[2-(3,5-Dimethyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-
(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5- {3-[2-(3-methyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-
10 (tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2- {5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-
oxadiazol-3-yl}-*N*-3-pyridinylacetamide,
6- {5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-
oxadiazol-2-yl}-2-piperidinone,
15 1-Ethyl-5- {5-[(3-methyl-1*H*-1,2,4-triazol-5-yl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-
(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)acetamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
20 1,2,4-oxadiazol-3-yl}methyl)benzamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)-2-phenylacetamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)-2-methylpropanamide,
25 *N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)-3-methylbutanamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)cyclohexanecarboxamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
30 1,2,4-oxadiazol-3-yl}methyl)-2-furancarboxamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)methanesulfonamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)benzenesulfonamide,
35 *N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)-1-phenylmethanesulfonamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)-2-propanesulfonamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
40 1,2,4-oxadiazol-3-yl}methyl)-1-propanesulfonamide,
N-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-
1,2,4-oxadiazol-3-yl}methyl)cyclopropanesulfonamide,

- N*-(5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl)methyl)-2-thiophenesulfonamide,
1-(5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl)methyl)-2-pyrrolidinone,
5 1-(5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl)methyl)-2-piperidinone,
5-{3-[(1-Acetyl-4-piperidiny)methyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(3-{[1-(3-methylbutanoyl)-4-piperidiny)methyl]-1,2,4-oxadiazol-5-yl})-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
10 1-Ethyl-5-(3-{[1-(methylsulfonyl)-4-piperidiny)methyl]-1,2,4-oxadiazol-5-yl})-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[1-(phenylsulfonyl)cyclopropyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
15 1-Ethyl-5-[3-(phenylmethyl)-1,2,4-oxadiazol-5-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-[3-(1-phenylethyl)-1,2,4-oxadiazol-5-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(3-{[4-(methyloxy)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
20 5-(3-{[4-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-(3-{[3-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
25 5-(3-{[4-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[(phenyloxy)methyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[3-(5,6,7,8-tetrahydro[1,2,4]triazolo[4,3-*a*]pyridin-3-yl)methyl]-1,2,4-oxadiazol-5-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
30 1-Ethyl-5-{3-[(4-phenyl-1-piperazinyl)methyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(5-ethyl-1,2,4-oxadiazol-3-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
35 5-(5-{[4-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-3-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(5-{[4-(methyloxy)phenyl]methyl}-1,2,4-oxadiazol-3-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine, or
5-(3,8-Dioxa-1-azaspiro[4.5]dec-1-en-2-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine;
40

or a salt thereof.

43. A compound or salt as claimed in any of claims 1 to 38, which is:

- 1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 14),
5 5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 17),
1-Ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 23),
10 1-Ethyl-5-[5-(3-methyloxetan-3-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 34),
1-Ethyl-5-{5-[(4-methylpiperazin-1-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 35),
1-Ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-yl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 38),
15 also named: 1-Ethyl-5-[5-(morpholin-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 39),
1-Ethyl-5-[5-(tetrahydrofuran-2-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 44),
20 1-Ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 77), or
1-Ethyl-5-{3-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 84);
25 or a salt thereof.

44. A compound or salt as claimed any preceding claim, which is the compound or a pharmaceutically acceptable salt thereof.

45. A compound or salt as claimed in any preceding claim, which is in a particle-size-reduced form.

46. A compound or salt as claimed in claim 45, wherein the particle size (D50 value) of the size-reduced compound or salt is about 0.5 to about 10 microns.

47. A compound or salt as claimed in any preceding claim, for use as an active therapeutic substance in a mammal such as a human.

48. A pharmaceutical composition comprising a compound of formula (I) or (IA), as defined in any of claims 1 to 46, or a pharmaceutically acceptable salt thereof, and one or more pharmaceutically acceptable carriers and/or excipients.

49. A pharmaceutical composition as claimed in claim 48 which is suitable for and/or adapted for inhaled administration.

5 50. A pharmaceutical composition as claimed in claim 48 which is suitable for and/or adapted for oral administration.

10 51. A pharmaceutical composition as claimed in claim 48, 49 or 50, for the treatment and/or prophylaxis of an inflammatory and/or allergic disease or cognitive impairment in a mammal such as a human.

15 52. The use of a compound of formula (I) or (IA), as defined in any of claims 1 to 46, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment and/or prophylaxis of an inflammatory and/or allergic disease or cognitive impairment in a mammal such as a human.

20 53. A method of treatment and/or prophylaxis of an inflammatory and/or allergic disease or cognitive impairment in a mammal such as a human in need thereof, which method comprises administering to the mammal a therapeutically effective amount of a compound of formula (I) or (IA), as defined in any of claims 1 to 46, or a pharmaceutically acceptable salt thereof.

25 54. A composition, or the use or a method as claimed in claim 51, 52 or 53, wherein the composition or medicament or method is for the treatment and/or prophylaxis of chronic obstructive pulmonary disease (COPD), asthma, rheumatoid arthritis or allergic rhinitis in a mammal such as a human.

30 55. A composition, the use or a method as claimed in claim 54, wherein the composition or medicament or method is for the treatment and/or prophylaxis of chronic obstructive pulmonary disease (COPD) in a mammal such as a human.

35 56. A composition, the use or a method as claimed in claim 54, wherein the composition or medicament or method is for the treatment and/or prophylaxis of asthma in a mammal such as a human.

40 57. A composition, the use or a method as claimed in any of claims 51 to 56, wherein the composition or medicament is for oral administration and is a pharmaceutical composition as defined in claim 50, or wherein the method comprises oral administration to the mammal of a pharmaceutical composition suitable for oral administration and as defined in claim 50.